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ABSTRACT

The effectiveness of traditional models of remedial education of students has been called into question. Current research supports models that would merge remedial and regular education and provide all students with broad curriculum access and the opportunity to receive instruction that is adaptive to their needs. Guidelines for addressing remediation in social studies can be generated from a review of current research. There is a clear need for a better understanding of aspects of student success and failure from psychological as well as sociological and anthropological points of view. Attention should shift from concern about the deficits of students to concern about the quality of the pupils' learning environment. This would cause remediation efforts to become part of a broad program of adaptive education for all students. Also, the importance of the context and processes of schooling would join the issue of cognitive processes in discussions of appropriate curriculum and instructional strategies to be used in teaching social studies. Increased collaboration among special needs teachers and subject area teachers to provide appropriate levels and types of instruction for all students seems to be the most appropriate path for the future. A 76-item bibliography is included. (JB)

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Remediation in Secondary Social Studies

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Remediation in Secondary Social Studies

The New York State Board of Regents' Action Plan enacted in 1986, created minimum comtepency levels in social studies and other subject matter areas that students must achieve in order to meet diploma requirements. The plan requires all students to take Regents Competency Tests in social studies at the end of grades 10 and 11. Students who fail the competency tests in social studies must be provided with remedial instruction--that is, instruction using materials and techniques specifically designed to meet the individual instructional needs of those students. The Regents' plan leaves decisions regarding the implementation of this mandate up to the individual schools, however, it is recommended that the instructional program be delievered by a certified social studies teacher.

In the past, remedial instruction has been the province of special education teachers or teachers of basic skills courses such as mathematics or language. Now, however, social studies educators must start to consider what it means to provide remedial instruction in social studies content. How will remedial instruction differ from what we consider "regular" instruction in social studies?

The purpose of this paper is to provide an overview of the research literature on remedial education in general and social studies teaching and learning in particular. The questions guiding this review included: (a) what is known about effective methods of providing remedial instruction to students from the general school population? (b) how do we account for student success and/or failure in social studies classrooms? and (c) What instructional strategies are most effective in increasing student achievement in social studies?

The paper is organized into four major sections, beginning with a discussion of the nature and aims of remedial education. The second examines the assumptions concerning the determinants of student academic success and failure. Section three reviews psychological research, and provides an overview of cognitive conceptions of learning. In this section, the implications of current theories of learning for making instructional decisions will be discussed. The fourth section of the paper presents a critique of the psychological conceptions of student success and failure and examines the findings of ethnographic research for alternative approaches to meeting individual needs of students. In the conclusion, I attempt to infer and summarize available guidelines and suggestions from the research literature.

The Nature and Aims of Remedial Education

In recent years, there has been increased criticism of the rationale, methods, and models used to guide instruction in remedial and special education (e.g., Bines, 1986; Clark, 1977; McNicholas, 1979; Reynolds, Wang, & Walberg, 1987; Stainback & Stainback, 1984). Educators in North America and the United Kingdom have begun to critique the implications of a system in which students cannot receive special services until they are labeled special students. In the past, remedial interventions have been "based on implicit assumptions that there is a level of functioning which can be regarded as 'normal' and another level which can be viewed as 'abnormal'. Remedial education, concerned with these apparently 'abnormal', individual levels of functioning is thus based on an 'ideology of pathology'" (Bines, p. 16).

The term "remedial education" implies that the aim of such instruction is to "put things right." Poor performance on standard measures of achievement, it is implied, results from an absence of the required competencies and qualities. What is proposed by this conception is a deficit model of learning where low achievement results from deficiencies in personality, gaps in knowledge, or a weak matching of competencies to tasks. The problems to be corrected by remediation may be short-term or long-term. They may be general difficulties that affect achievement in a broad range of subjects or they may be related to specific procedures and subject areas. If remedial education is so regarded, then there are certain important considerations, including: (a) who should receive remediation? (b) what should remediation consist of? (c) when should it be provided? and (d) how does remedial education differ from special education? Clark (1977) points out that many people use the term as a euphemism for "the teaching of slow children with little promise of any progress" (p. 18). If this is the province of remedial education, Clark asks whether it is different from or just slower than normal education.

The current movement in Britain for "rights without labels" is based upon research that illustrates the lack of validity and reliability for the "categorical" policies of special education. Reynolds et al. (1987) argue that the categorization system (of children, teachers, and programs) produces "disjointed incrementalism," that is, narrowly framed programs with their own eligibility , accountability, funding, and advocacy systems. This circumstance, according to Reynolds et al., leads to excessive proceduralization, increased costs, scientifically questionable categories, and a high requirement for "specialist" staff.

Stainback and Stainback (1984) argue that the existing dual system of personnel, pupils, and funding should be unified. Their argument rests on three premises. First,

there are not two distinct types of students (e.g., regular and exceptional). All students differ along continuums of intelligence, physical, and psychological characteristics. Individual differences are universal and the designation of "normal" or "special" is arbitrary. Secondly, there is nothing to warrant that individualized services be a privilege provided only to the "exceptional" child. In effect, the dual system is discriminatory. Third, there are not two discrete sets of instructional methods--one for use with "regular" students and one for "special" students. Their comparison of dual and unified systems of instruction is illustrated in Table 1.

In summary, there is a trend in the recent literature toward advocating a restructuring of the aims and nature of remedial education into a model that integrates the current dual system. McNicholas (1979) argues that the aims of remedial education should not be divorced from the aims of education in general. "More thought should be given to 'education' rather than 'remedial education' so that we do not lose sight of our aims in pursuit of some narrow objectives" (p. 31). This suggests that the focus of our efforts should shift from a concern about the "deficits" of the individual to a concern about the quality of the pupils' learning environment.

Bines (1986) suggests a redefinition of remedial education by creating a "new partnership" between special educators and subject matter teachers, in which remediation becomes part of a broad program of adaptive education for all students--including intensive efforts on behalf of children who have not progressed under the current school programs. Bines cites research that has identified the importance of considering the context and processes of schooling rather than the 'deficits' of individual pupils as the foundation for changes in organization and curricula of schools.

Implications for Remediation

Based upon the recent critiques cited above, there are several implications that should be considered prior to initiating programs to provide for the needs of all students in the school population. The traditional view of learning difficulties would seem to be unsatisfactory for a number of reasons. First, identification of remedial pupils has frequently been unreliable and based upon general criteria with little effort to assess learning difficulties in particular subject areas. Effective identification requires the development of assessment efforts that: (a) assess the match between the pupil, the curriculum, and the instructional methodologies used; (b) analyze the mismatch, if one occurs; (c) monitor progress where matching is appropriate; and (d) evaluate outcomes of a particular set

of teaching objectives (Cornwall, 1985). A second reason that the traditional view of learning difficulties is unsatisfactory is that the artificial categorization of students as "regular" and "special" is stigmatizing and fosters discrimination because "rights" are a function of labels.

Second, there is a need for more knowledge about subject teachers' constructs of pupils with learning difficulties and more research on the skills and knowledge required by pupils in different subjects and different modes of presentation. Bines (1986) states that, "it would also be imporatant to look at differences within subjects, for they are far from homogenous, and explore how different views of the same subject may or may not generate different concerns about learning difficulties" (p. 93).

Finally, there is the need for a better understanding of the aspects of academic success and failure. Bines points out that this understanding might facilitate further delineation and analysis of the complex relationships among definitions of knowledge, processes of schooling, social inequities, and pre-dispositions (perceived and actual) that may be related to class, gender, and individual capacities and experiences.

These implications illustrate the critical nature of current efforts to define a knowledge base of teaching. The current "blueprint" for the knowledge base of teaching includes for major sources: (a) scholarship in the content disciplines, (b) the materials and settings of the institutionalized educational process, (c) formal educational research, and (d) the wisdom of practice (Shulman, 1987). "The key to distinguishing the knowledge base of teaching," according to Shulman, "lies at the intersection of content and pedagogy, in the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students" (1987, p. 15).

In this paper, I will focus on Shulman's third knowledge source, formal educational scholarship, in an attempt to identify guidelines for how we might proceed in meeting the individual needs of students in social studies classrooms. This literature includes findings from empirical research in the areas of teaching, learning, and human development from both psychological as well as sociolgical or naturalistic perspectives. It is important to emphasize that necessary incompleteness of any one perspective and the resulting need to examine a variety of theoretical points of view.

Each perspective fomulates problems and solutions on its own way. Each is "true," as Schwab has pointed out, in own its own terms. The incompletness of any one perpsective poses a problem for us, because "we not only seek what it tells us to seek, we do not seek and only rarely note what it does not instruct us to search out" (Schwab, 1978, p. 333). Bines (1986) warns against the development of "tunnel vision" regarding how we assess and respond to student success and failure in schools. She points out that the debates about remedial education have been dominated by categories of thinking that are primarily psychological. In order to more clearly understand the curricular and pedagogic aspects of academic success and failure, she stresses the need to draw on sociological approaches, which are particularly concerned with processes of schooling.

"The possessor of only one of a collection of competing theories sees its subject matter in only the peculiar light cast by that theory and conceives as alternatives of education (ends or means) only the ones suggested by the one view and judges among them only in the light of the one" (Schwab, 1978, p. 333). In an attempt to avert the "vice" of tunnel vision, the research reivewed in this paper will be drawn from two distinct perspectives. First, research on effective teaching, that is research that is primarily psychological in orientation will be reviewed. Next, research drawing on sociological and anthropological perspectives will be presented. It is hoped that the inferences and suggestions distilled from these sources will provide a more wholistic conception of the problem being considered as well as a effective agenda for action.

Effective Teaching--The Psychologistic View

Current Conceptions of Learning

During the 1960's and 1970's, psychology and education began a general shift from behavioristic to cognitive conceptions of learning, cognitive conceptions being those concerned with factors that influence changes in human performance, knowledge structures, and conceptions. Shuell (1986) points out that the cognitive orientation was evident in early research on verbal learning (Ausubel, 1962), discovery learning (Bruner, 1961), imagery (Paivio, 1969), and generative learning (Wittrock, 1974). However, it was not until the 1980's that cognitive psychology began to to focus its attention on the learning process.

The main difference between cognitive and behavioral conceptions of learning is the emphasis on performance of a system rather than on performance of an individual. As Shuell points out:

> Cognitive psychology is concerned with various mental activities (such as perception, thinking, knowledge representation, and memory) related to human information processing and problem solving. The emphasis is no longer strictly on behavior, but on mental processes and knowledge structures that can be inferred from behavioral indices and that are responsible for various types of human behavior" (p. 414).

Cognitive theories of learning reflect a concern for the more complex forms of learning, or "meaningful learning". While there is yet a single truly comprehensive and viable cognitive theory of learning, there are conceptions of learning that are reshaping the way the teaching-learning process is researched and analyzed. Anderson (1984) stresses the role of prior knowledge in learning. This conception known as "schema theory," focuses on the organized, structured and abstract bodies of information (schema) that learners bring with them to a learning task. These schemata determine how the task is interpreted and, as a result, what the learner will understand and acquire in that situation.

Another development in cognitive learning theory is the emphasis on domain-specific knowledge (Glaser, 1984; Shulman, 1987). Traditional research on learning has been oriented toward identifying general "laws" that govern the learning process. Recent research has convincingly illustrated that experts and novices in a particular subject approach problems in fundamentally different ways.

The growth of knowledge and research in this area has produced several important implications for the way in which we conceive the teaching-learning process in schools. In his review of research on cognitive conceptions of learning, Shuell (1986) outlines five basic implications. First, since learning is an active process, the teacher's tasks involves more than the presentation of information. Shuell notes that "if students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students engage in learning activities" (p. 429). This means taking into account factors such as:

- prior knowledge
- context in which material is presented
- realization that students' interpretations and understanding of new material depend upon available and appropriate schemata.

As a result, it is important to remember that what the <u>student</u> does is more important in actually determining the learning that occurs than what the <u>teacher</u> does (Shuell,

1986). Thus, the traditional role of the teacher has evolved, requiring that the teacher understand how to select appropriate content, be aware of cognitive processes required of the learner when studying that content, and understand the role of prior knowledge and existing knowledge structures and how they affect learning.

A second implication is that with the advent of cognitive theories of learning, we may be on the verge of a viable body of knowledge about how to best capitalize on the active nature of learning as represented by orientations such as discovery learning and open education. Thirdly, theories of learning from instruction are somewhat different from regular theories of learning and important theories of how instructional strategies should be applied are beginning to emerge (Snow & Lohman, 1984).

A fourth implication regards the role of learners' prior knowledge. We know that learners begin learning with misconceptions about the material they study and that remnants of these misconceptions may linger even after they experience success in a particular subject. Lastly, Shuell insists that concern for cognitive learning does not necessarily invalidate traditional, behavioral conceptions of learning.

In the following section, some frameworks for analyzing the teaching-learning process, based upon the cognitive approach will be discussed.

The Cognitive Approach and the Teaching-Learning Process

The cognitive approach has expanded upon our traditional conception of the teaching-learning process. The implications of cognitive learning theory outlined above illustrate how the outcomes of teaching depend upon both teaching strategies and learning strategies. Weinstein and Mayer (1986) have developed a conceptual framework to illustrate the elements of the teaching-learning process. The elements include: (a) teacher characteristics--such as the teacher's existing knowledge concerning the subject matter and how to teach, that may be required for the teaching strategy selected; (b) teaching strategies--including what is presented, when it is presented, and how it is presented; (c) learner characteristics--such as the learner's existing knowledge concerning facts, procedures, and strategies, that may be required for the learning strategy selected; (d) learning strategies--such as the behaviors that the learner engages in during learning that are intended to influence affective and cognitive processes during encoding; (e) encoding processes--the internal processes during learning such as how the learner selects, organizes, and integrates new information; (f) learning outcomes--newly acquired knowledge and processes; and (g)

performance--behavior on assessments of retention and transfer. Following up on Shuell's position that it is more important to examine what the student does in learning situations than what the teacher does, the next section examines Weinstein and Mayer's work on learning strategies.

Learning Strategies. Students with the aptitude to learn from conventional teaching methods will usually succeed in that environment. However, the wide range of student diversity means that only a few students will fall into this category, greatly complicating the task of the teacher. One remedy is to diagnose the use of inappropriate learning strategies and provide direct training as a remedy.

In cases where learners lack the skills or experience necessary to chose and execute the appropriate strategy for learning, it becomes the teacher's job to provide directed or guided training in learning strategies (Segal, Chipman, & Glaser, 1985).

Weinstein and Mayer (1986) identify seven categories of cognitive learning strategies and the encoding processes they facilitate. When the goal of instruction is to have the learner select information and transfer it to memory (selection) or to transfer information from working memory to long-term memory for permanent storage (acquisition), rehearsal strategies are the most appropriate. For basic tasks, rehearsal involves such things as repeating the names of items in a list. For complex tasks, this strategy might include copying or underlining material presented in class.

If the goal of instruction is building connections between ideas (construction), then the appropriate learning strategies would include organization of information. For basic tasks this is accomplished through grouping or clustering to-be-learned items. The more complex tasks would require the learner to outline a passage, create a hierarchy, or map a relationships.

If the learner is being asked to actively search prior knowledge and transfer this knowledge from long-term to working memory to build external connections, the encoding process is called integration. In this case, the learner must use elaboration strategies such as creating a mental image; for more complex situations, learners must paraphrase, create analogies, or describe how new information relates to existing knowledge.

The final group of learning strategies involves monitoring comprehension. In this case, the learner is checking for comprehension failures through the use of self-questioning to check understanding or through the use of prepared study guides. This learning strategy seems to be

related to all four of the encoding processes (i.e., selection, acquisition, construction, and integration).

Selecting and Adapting Teaching Strategies. Most students need more support than conventional teaching can supply (Corno & Snow, 1986). Adaptive teaching is an approach in which the teacher arranges or rearranges environmental conditions to fit individual learner differences. Corno and Snow (1986) point out that since individuals differ in aptitudes relevant to learning at the start of instruction, there is a necessary choice to be made between two basic approaches to adaptive teaching. Teaching can focus on directly developing the aptitudes needed for further instruction or it can focus on ways to circumvent or compensate for existing sources of inaptitude so that instruction can proceed.

The form of adaptive teaching is emphasized depends upon the nature of the aptitude in a given instance and the availability of alternative methods of teaching. For example, Corno and Snow point out that teachers will try to develop students reading and mathematics ability directly because these are aptitudes that are common goals of education in themselves as well as necessary abilities for success in subjects such as social studies and science. If students' reading and mathematics aptitudes are not sufficiently developed, then later instruction must be postponed or alternative instructional methods must be developed.

Processes of Adaptive Education. Glaser (1977) describes adaptive education as having four basic stages. First, there is some assessment of the present state of the learner, including the learner's readiness to profit from the possible learning opportunities. Depending upon the conditions identified by this assessment, some appropriate teaching action is selected and implemented. A follow-up assessment shows whether or not the intended goal was achieved. If it wasn't, then the sequence is repeated until the goal is realized. When the initial goal is met the teacher moves on to the next goal.

It is important to note that when learners are simply recycled through the same teaching operation without variation, the teaching is regarded as non-adaptive, even if the goal is subsequently met. Truly adaptive teaching provides alternative instructional routes for the learner to reach common goals of instruction and includes a remedial loop as well as alternatives for remediation of inaptitudes (Snow & Lohman, 1984).

The adjustments teachers make in their instruction may be qualitative or quantitative variations, ranging from student to student or from class to class. Corno and

Snow(1986) have provided examples of each type. Qualitative variations include: (a) manipulating organizational structures of the class--groups, learning centers, reward structures; (b) varying of materials chosen to present information or to guide problem-solving--examples, analogies, review, summary; (c) varying of support materials--media, aides, levels and forms of questions asked; (d) varying of reinforcement procedures; and (e) prompting student questions in different ways to aid in diagnosis.

Quantitative adjustments to teaching include varying the amount of: (a) time spent with different students on the same problem, (b) time students are encouraged to spend with other students or media, (c) number of questions asked to assess learning, (d) feedback given for particular responses, and (e) pacing.

Criteria for judging the adaptiveness of a teaching system include: (a) the degree to which the alternative teaching operations are appropriately tied to valid assessments of the state of the learner's aptitude; and (b) the equal opportunity to reach common educational goals despite individual differences in aptitude at the start.

Corno and Snow (1986) have developed a taxonomy of adaptive learning, which illustrates, based upon findings from empirical research, the most appropriate forms of teaching (inaptitude circumvention or aptitude development) and level of instructional mediation (high or low) in relation to the type of individual differences to which the teaching is adapting (e.g., intellectual abilities, learning style, academic motivation).

The research on the relationship between individual differences and teaching strategies suggests that different teaching strategies make differing demands on learners. For example, as instruction takes over more of the information processing demands, learning depends less on general intellectual abilities. As a result, instruction designed to circumvent inaptitude (low ability) will reduce, in some way, the processing burden on the learner. In so doing, the instruction is mediating student cognition.

Corno and Snow point out that little mediation gives learners opportunities for self-direction and discovery. Higher levels of mediation provide models for learners to imitate. Modeling combined with guided practice provides an even greater level of mediation, because it is more directive in nature.

At the most intrusive end of the continuum is teaching that both directs and compensates learners in an essentially prosthetic sense--the teaching does for the students what

they cannot or will not do for themselves. (Corno & Snow, 1986, p. 620)

This most intrusive form of teaching has been described as "short-circuiting" student learning processes and the least intrusive teaching as "activating" student processes (Solomon & Kendall, 1979). Activating student processes is the notion of capitalizing on student preferences and capabilities. Special education programs appear to be the best example of "short-circuiting" mediation. A growing number of studies concerned with aptitude-treatment interaction (the relation between individual differences and teaching strategies), suggest that "activating" strategies, such as discovery learning are effective for high ability learners, but ineffective or even detrimental to low ability learners (Cronbach & Snow, 1977; Snow, 1982).

The ability to move back and forth along the continuum of instructional mediation in relation to student differences requires a high degree of skill and judgment on the teachers part. Making these instructional decisions, balancing common goals for all learners, deciding upon individual goals, and facing a wide range of aptitudes in most classrooms is the most problematic feature of teaching.

The goal of this model is to adapt teaching to the learner and also allow the learner to adapt to the instruction. The teaching-learning process is a dynamic one and it requires the teacher to be attuned to a complex mixture of goals, aptitudes, and strategies. Implementing an adaptive teaching approach is no easy task. Particularly problematic is how to move learners from high mediation strategies to success with low mediation strategies. Corno and Snow point out that, the preparation of teachers to use adaptive teaching must itself be adaptive and that for this model to be successful it must go beyond simple approaches such as practice and feedback or coaching. Teachers "must provide substansive training on the component skills involved in task performance and must also develop superordinate executive and control strategies involved in guiding performance and in generalizing and transferring skills to the classroom" (Corno & Snow, 1986, p. 624). This will require a long-term commitment to training and support of teachers if adaptive teaching is to be effective.

Reserach on Effective Strategies for Increasing Student Achievement in Social Studies

The following paragraphs examine instructional strategies that have been shown to be effective methods of increasing student achievement in social studies education. These strategies are reviewed for the purpose of providing guidelines, based upon empirical research literature, for the selection of alternative social studies teaching

strategies. First half of the section is devoted to a review of the research concept teaching and learning in social studies.[1] The latter half is devoted to a brief analysis of the effectiveness of "generic" teaching strategies such as: cooperative learning, individualized instruction, mastery learning, and ability grouping.

Teaching Concepts

Teaching concepts has long been a important concern of social educators and continues to be a central concern today (e.g., Hunt & Metcalf, 1955; Wesley & Wronski, 1958; Martorella, 1971; Phillips, 1974). For example, the K-12 social studies program of New York State is organized around 16 concepts derived from history and the social sciences.[2]

Despite the attention concept learning has received over the years, there is still confusion regarding how to best teach social studies concepts. Martorella (1977) noted that,

> What the research studies, reviews, and guidelines all generally share is a common operational framework concerning the nature of concepts. In contrast, most curriculum and instruction discussions within the field of social studies lack such consensus and precision (Shaver & Larkins, 1973). (p. 22)

There are three basic strategies for concept instruction in the social studies that can be identified in the research literature (Stanley, 1984). These are: (a) Taba's (1971) inductive concept development strategy; (b) the inductive-discovery strategy developed by Gagne (1970); and (c) the deductive expository strategy (Tennyson and Park, 1980).

Stanley (1984) summarized each of these methods as follows:

The inductive concept development:

1. After students have been exposed to an experience, they are asked to describe and list what they have observed.

2. Once a sufficient list has been complied, students are asked to find some basis for grouping them and to identify and explain the basis for forming the specific groups.

3. Finally, students are asked to label or name the groups they have formed and to consider if new items could be subsumed under these labels or if the groups could be combined or relabeled.

The inductive-discovery strategy:

1. Give student the name or label of the concept and present them with some examples which illustrate the critical attributes of the concept.

2. Alternately present examples and nonexamples to the students; in each case indicate if it is or is not an example of the concept.

3. Ask students to infer or discover the critical (or defining) attributes of the concept based on the example or nonexamples presented.

4. Have students apply the concept to new examples and nonexamples presented.

The deductive-expository strategy:

1. Present the student with a label for the concept and a definition that includes all the essential defining attributes.

2. Alternately present examples and nonexamples of the concept and explain why each is or is not an example.

3. Present new examples and nonexamples to test students' understanding and to expand learning. Immediately reinforce correct answers and correct wrong answers. Ask students why each was or was not an example of the concept.

Stanley (1984) found that Taba's strategy was clearly the most frequently advocated approach to teaching concepts in social studies. However, very little research exists in support of this approach. One explanation for the continued advocacy of this method despite the lack of verifying research is found in the conflict between how social studies educators have viewed concepts and their actual nature. Martorella (1977) has noted that the term concept is used in at least five different ways in discussions of social studies curriculum and instruction.[3]

Stanley and Mathews (1985) have critiqued the "classical" definition of concepts as held by most social studies educators and the implications of this view for social studies instruction. The "classical" definition of a concept is "a class or category all the members of which share a particular combination of critical properties not shared by any other class" (Markle & Tiemann, 1976, p. 54). Stanley and Mathews point out that the classical view of concepts rests on three assumptions: (a) that concepts are summary representations, that is, they describe an entire class of phenomena; (b) the features that represent a concept are necessary and sufficient to define that concept;

and (c) if concept "X" is a subset of concept "Y", the defining features of "Y" are nested in "X".

The major limitation of this view is that it fails to consider the existence of different classes of concepts (based on their nature, function, and precision), each of which present significantly different problems for instruction. In the classification of concepts there are two general components: (a) the relational structure between concepts in a knowledge domain (successive or coordinate); and (b) the variability of characteristics of each concept in a domain (constant or variable) (Tennyson & Cocchiarella, 1986).

The relational structure of concepts is based upon their production rules. Tennyson and Cocchiarella note for example that, in successive relationships, learning requires the generalizations with a concept class. With coordinate relationships, learning requires generalizations within a class as well as discrimination between concepts.

The characteristics, or attributes of a concept can be defined as constant (conjunctive concepts) or variable (disjunctive concepts). For example, a conjunctive concept has an additive dimension--that is, it is defined by the simultaneous inclusion of multiple attributes. An example of a conjunctive concept is "mountain range." A disjunctive concept has alternative dimensions, that is, its attributes may vary. For example, "advancing a base" is a disjunctive concept in baseball, because a batter may proceed to first based as a result of getting a hit, when four balls have been pitched, or if he/she is hit by a pitched ball.

As is evident from the above, the "classical" notion of a concept is limited as a basis for selecting appropriate instructional designs for teaching. Concepts fall into four basic categories: successive-constant, coordinate-constant, successive-relational, and coordinate-relational, each demanding different processes for learning and teaching.

Research on concept instruction and learning has concluded there are some specific strategies and instructional techniques that are more effective than others for teaching social studies concepts (i.e., Martorella, 1971; Markle & Tiemann, 1976; Tennyson & Park, 1980; Tennyson & Cocchiarell, 1986).

Martorella's (1977) review of research on conceptual instruction posited several conclusions regarding the effects of varying the forms of attributes, sequencing of examples and nonexamples and the combinations of these variables on concept learning.

> First, knowledge of the criterial attributes of concepts is inversely related to the difficutly experienced in identifications of concept examples. Second, explicit assistance in identifying and relating critical properties of a concept facilitates learning. Third, provision of a concept definition facilitates learning. And finally, students learn concepts effeciently when taught with an instructional model that minimally emphasizes delineation of attributes and uses clear and specific examples. (p. 23)

Since Martorella's review, there have been a number of important studies of conceptual teaching in social studies. In the search for the most appropriate ways of teaching social studies concepts (which tend to fall into the successive-variable category), researchers have found the deductive-expository method of concept teaching to be the most effective strategy (Markle and Tiemann, 1976; Merrill & Tennyson 1977; Klausmeier & Hooper, 1974). There is a large body of research illustrating the efficacy of the deductive-expository method of teaching social studies concepts at both the elementary and secondary levels (Kleg & Karabinus, 1986; McKinney, 1985; McKinney, Ford, Larkins, & Peddicord, 1984; McKinney, Larkins, Burts, Davis, 1982; McKinney, Larkins, Ford, & Davis, 1983; McKinney, Larkins, & Peddicord, 1982; Yoho, 1986). The instructional model used in most of the research in social studies is that developed by Tennyson and associates (Merrill & Tennyson, 1977; Tennyson, Youngers, & Suebsonthi, 1983). Tennyson & Cocchiarella (1986) provide the most up to date and elaborate description of this model and how specific instructional design characteristics should be used in teaching different types of concepts (see Table 2).

McKinney and his associates have conducted a series of studies examining the effects of various instructional models for teaching concepts. McKinney, Larkins, Burts, and Davis (1982) compared the efficacy of Taba's inductive approach to teaching concepts with the five step deductive approach developed by Merrill and Tennyson. The five parts of the Merrill and Tennyson model included: (a) defining the concept; (b) expository presentation--the presentation of examples and non-examples; (c) attribute isolation--as examples and non-examples are presented the critical attributes of the concept are highlighted; (d) inquisitory practice presentation--learners are presented with new examples and non-examples and asked to classify each; and (e) testing. The findings of this study suggested that the deductive approach is better than the inductive when teaching young children (first grade students).

In three studies conducted with elementary students, McKinney and associates examined the effectiveness of three instructional designs for concept teaching: Merrill-

Tennyson's deductive model, Gagne's inductive model, and a reading-recitation method. The treatment described as Gagne's model consisted of presenting examples and non-examples and a statement that each was or was not the concept. No definitions or student practice was included. The reading-recitation method consisted of several paragraphs, including a definition of the concept and examples, students were asked to read both silently. Following the silent reading teachers read each paragraph aloud and students were asked to recall information about the content of the reading.

In the first study (McKinney, Larkins, & Peddicord, 1982), one teacher taught three groups of fourth-grade students the concept "cultural diffusion" and no significant differences between the treatments were found. The second study (McKinney, Ford, Larkins, & Peddicord, 1984), replicated the first study with three teachers teaching two concepts to sixth-grade students. In the second study, the mean for the Merrill-Tennyson group was significantly higher than the means for the Gagne and reading-recitation groups.

In the tie-breaking third study (McKinney, Larkins, Ford, & Davis, 1983), the number of concepts taught was increased to three and three fourth-grade teachers were used. Findings from the third study confirmed those of the second and McKinney and associates concluded that elementary children learn more from the Merrill and Tennyson deductive approach of teaching concepts. However, it was not clear whether the observed differences were the result of structural superiority of the Merrill and Tennyson model or because it requires more allocated time.

In the past four years research on conceptual learning in social studies shifted to an examination of the structural components of deductive models of concept teaching. McKinney (1985) investigated the effectiveness of various parts of Merrill and Tennyson's model. Two previous studies by Mckinney and associates (McKinney et al., 1983; McKinney et al. 1981) suggested that the inquisitory practice was the most efficacious part of the model. Findings from this study of 70 undergraduate students, did not support this claim. McKinney concluded that the presentation of examples and nonexamples enhances the acquisition of social studies concepts, however the presentation format may meet the requirements of Merrill and Tennyson's expository presentation or their inquisitory practice presentation. The addition of a definition or the combination of all parts of the model did not appear to be essential--that is the full model was not greater than its parts.

A number of studies have examined the effects of presentation order of examples and nonexamples, when using

deductive approaches, on student acquisition of concepts. McKinney, Ford, and McKinney (1984) examined the presentation order of examples/nonexample pairs during the expository phase--testing Merrill and Tennyson's (1977) claim that example pairs should progress from easy to difficult.[4] Using a randomized post-test only design with 61 undergraduate students, McKinney et al. found that presentation order of the examples and nonexamples in the expository presentation of the Merrill and Tennyson model does not significantly effect student achievement. These findings were seen as important for classroom teaching, because the cumbersome "pilot testing" of difficulty level of examples and nonexamples was found to be unnecessary, thus making the design easier for teachers to use.

In the early 1980's Tennyson and his colleagues suggested modifications to the instructional design presented in Merrill and Tennyson (1977). Tennyson and Park (1980) reviewed research on concept instruction and suggested that examples and nonexamples in the inquistory practice presentation should be ordered in a response-sensitive presentation rather than randomly ordered. In response-sensitive presentation the presentation is based upon the student's on-task behavior.

> ...If the student's classification behavior is wrong, descrimination learning between the concepts would be facilitated by next presenting the concept for which the overgeneralization error was made. For example, if the student classified concept A as B, concept B would be presented next. If the instruction continues without facilitating the discrimination learning between the two concepts, the confusion would interfere with, not only the two concepts, but also with the learnng of other coordinate concepts because the learning of coordinate concepts occues simultaneously, the learning of one concept contributing to the learning of the others. (Park & Tennyson, 1980, p. 64-65)

Tennyson, Youngers, Suebsonthi (1983) investigated mathematical concept learning by children using instructional presentation forms for prototype formation and classification-skill development. They found that analysis of attributes common to examples of a given concept was not a prerequisite to concept formation. This result supported Tennyson, Chao, Youngers' (1981) proposition that concept learning is a twofold process including formation of prototype and the development of generalization and discrimination classification skills. These findings also lead to a modification of the concept teaching model proposed by Tennyson and Park (1980): (a) analyzing the concept to be learned, (b) preparing a definition, (c) selecting a best example (findings from Tennyson et al.

1981; 1983), (d) developing rational sets of examples, and (e) sequencing the presentation order of examples by expository rational sets followed by interrogator rational sets.

Ford and McKinney (1986) presented the results of two studies investigating the effect of presentation order of examples and nonexamples of social studies concepts with elementary students. The first study, conducted with sixth grade students, compared the effect of a response-sensitive presentation to a response-insensitive presentation of examples and nonexamples. In addition the effects of recycling missed instances were examined. The first study found response-sensitive and/or recycling of missed instances were no more effective than presentations that were insensitive and excluded recycling. The second study attempted to replicate the findings concerning recycling of missed instances from the first study. Second grade students were randomly assigned to two treatment groups or a control group and received instruction about two concepts. The findings suggested that recycling missed instances during inquisitory practice presentation has no effect on concept acquisition. McKinney and Ford concluded that the modifications of the basic instructional design recommended by Tennyson and others unnecessarily complicated the procedure.

Yoho (1986) investigated the effectiveness of two different theoretical positions on how students learn concepts. He compared the model proposed by Tennyson and Park (1980), that suggested that students learn concepts by memorizing a list of critical attributes that are provided by the teacher or text, with Millward's (1980) contension that students learn a concept by forming a prototype in their memory by focusing of a best example. The study of 190 ninth-grade students compared the effectiveness of the presentations of examples and nonexamples that stressed a concept's critical attributes with best example concept lessons. The results of the study suggest that concept learning involves more than memorizing critical attributes. The most effective teaching strategy of the four used in the study emphasized prototype formation in a student's memory by focusing on a best example of a concept elaborating with upon that clear case with new examples. These findings support previous research that argued concepts are formed by encoding prototypes in memory (Park, 1984; Tennyson et al. 1981; Tennyson et al., 1983)

Yoho suggested that this strategy is effective because students usually do not have enoungh time to accommodate a list of critical attributes when learning a new concept. However, assimlation of a clear case of the concept (best example) can be achieved in a relatively short time frame. This is important for social studies teachers since they

must often teach material with a high density of concepts is short time intervals.

In a study of 103 undergraduate education majors, McKinney, Gilmore, Peddicord, and McCallum (1987) attempted to replicate the findings from previous studies examining the role of critical attributes and best examples in prototype formation. A secondary purpose of the study was to examine the effects of an expository presentation of examples and nonexamples with a best example presentation to determine whether expository presentation served as a best example. McKinney et al. found no significant difference concept acquisition when instruction strategies using critical attributes and best examples were compared. This is inconsistent with finding previous findings (e.g., Park, 1984; Tennyson et al. 1983; Yoho, 1986). This difference might be explained by the difference in age group studied (college students vs. elementary/secondary students) and by the fact that in this study group instruction was used instead of individualized instruction. The study also concluded that expository presentation resulted in better prototype formation than a best example only, which is also inconsistent with previous research. The results of the delayed posttesting in this study, supports the claim that learners create mental prototypes of concepts, however, they then forget the specific critical attributes.

Summary. The body of research on conceptual teaching and learning has continued to grow in recent years. It is now clear that deductive models of teaching concepts are the most effective and can be used with students as young as the primary grades (e.g., McKinney et al., 1982). However, there is a continuing debate regarding what elements of this approach to teaching concepts makes it structurally superior to other models.

There are a series of studies that support the simplication of the most popular deductive model of concept teaching, which was initially developed by Merrill and Tennyson. These studies have examined the differing modes of example presentation and found that random presentation of examples when using the deductive model are just as effective as arranging examples by difficulty level or according to response-sensitivity. There have been mixed findings with regard to an emphasis on critical attributes or best examples when presenting examples of concepts. However, the literature supports the proposition that concept learning is a twofold process that including formation of mental prototypes as well as the development of generalization and discrimination classification skills.

The most effective model for teaching social studies concepts would appear to emphasize prototype formation in the student's memory by focusing on best examples of the

concept. The most effective model would include the following steps: (a) analyzing the concept to be learned, (b) preparing a defintion, (c) selecting best examples, and (d) elaborating on best examples with new examples. The use of expository or inquisitory presentation techniques do not appear to effect student concept acquisition; and the presentation order of the examples or nonexamples were not found to significantly effect student achievement.

The literature provides, then, an extensive set of prescriptions for the effective design of conceptual instruction. However, there continues to be little evidence of the systematic application of these findings in social studies curriculum materials.

Generic Teaching Methods

In this section, several popular methods of teaching are reviewed, focusing on their potential to increase student achievement in social studies. These methods include: (a) cooperative learning, (b) individualized instruction, (c) mastery learning, and (d) ability grouping.

Cooperative learning. Cooperative learning appears to be a promising method for instruction in social studies because it can simultaneously achieve academic and socio-moral goals (Leming, 1985). The research to date has been primarily on the use of cooperative learning at the elementary school level and there has been little research on the persistence of gains attributed to cooperative learning. Nevertheless, the results warrant serious consideration by social studies teachers and program designers.

There are many variations of cooperative learning, however the four most widely studied are: Student Teams-Achievement Divisions (STAD) and Teams-Games-Tournaments (TGT) (see Leming, 1985 for brief descriptions of these methods); Jigsaw (Aronson, 1978); Group Investigation Model (Johnson & Johnson, 1975). The extensive field reserach carried out by R. Johnson, D. Johnson, and associates as well as by Slavin (1980, 1983) can be summarized as follows:

> Cooperative learning methods in general, when compared to non-cooperative learning groups, produce greater academic learning, better intergroup relations among black, white, and Hispanic students, enhanced self-esteem, and improved relationships between mainstreamed academically handicapped students and normal progress students. It was also found that cooperative learning develops general mutual concern and interpersonal trust among students and increases in students the propensity for prosocial behavior (Slavin, 1980, 1983; Sharan, 1980). (Leming, 1985, p. 151)

Individualized instruction. Individualized systems of instruction are programs in which students work at their own rates, through carefully designed course materials with the help of a study guide. In a meta-analysis of 51 studies of individualized instructional systems, Bangert, Kulik, and Kulik (1983) found only a small effect on student achievement in secondary school courses. The review included studies that investigated the effects of such approaches as Individually Prescribed Instruction (Glasser & Rosner, 1975); Program for Learning in Accordance with Needs (Flanagan, Shanner, Brudner, and Marker, 1975); and Personalized System of Instruction (Keller, 1968). Their review did not include approaches such as ability grouping, programmed instrutgion, computer-based teaching or individualized projects, assignments or learning contracts.

Their analysis did not confirm the great hopes once held for individualized systems of instruction. Indeed they found only a small effect on student achievement in secondary school courses. The average effect size was .10, that is the individualized instruction raised the performance of a group of students by one-tenth of a standard deviation or from the 50th percentile to the 54th percentile. Individualized systems of instruction also were not found to contribute significantly to student self-esteem, critical thinking, or attitudes toward subject matter.

Instead of producing dramatic effects, individualized instructional systems at the secondary level yield results that are much the same as traditional forms of classroom instruction. However, Bangert, Kulik, and Kulik, point out that at the college level, individualized systems have produced greater differences in achievement between groups.

Mastery learning. Martorella's (1977) review of research on social studies learning and instruction concluded that there were no superior cognitive effects from the master learning approach. Upon reviewing six studies of mastery learning in social studies, he noted that it appeared to be more difficult to carry out the approach with social studies content and that the studies reflect "the problems inherent in conducting carefully controlled experimental research over a short period of time in a subject area without tight structure and with an instructional system that seems to be ill suited to such constraints" (p. 30).

A recent meta-analysis of research on mastery learning illustrates that it generally has had a positive effect on student achievement for end-of-the-course and retention measures. The analysis also illustrates that the effects of mastery learning are particularly pronounced for less able students. Mastery learning programs also have had a

positive effect on students' attitudes toward course content and instruction.

Kulik, Kulik, and Bangert-Drowns (1988) analyzed 109 comparative studies for the effects of mastery learning on achievement. The meta-analysis confirmed some of the basic claims of mastery learning. Such programs were found to raise the achievement scores in the typical study by 0.52 standard deviations (or from the 50th percentile to the 70th percentile). The effects were consistent for both precollege and college programs. Mastery learning was found to have a strong effect on low aptitude students, however the effect size diminished as the students aptitude rose, indicating that mastery learning is less effective with high aptitude students.

The reviewers note that the positive effects of mastery learning were optimal when certain conditions exisited. These included: (a) a high level of mastery was required (95% to 100%); (b) effects were higher for group-based than self-paced programs; (c) the criterion for performance had to be a locally developed examination; (d) the effect sizes were larger for social studies courses than for science and mathematics courses.

All claims of mastery learning were not supported. Bloom (1984) suggests that mastery teaching raises the performance of 95% of the students to the 98th percentile. This review found that it raised student achievement on average to the 70th percentile. Secondly, Bloom predicted the variance in student performance would be at or near zero. However, Kulik, Kulik, and Bangert-Drowns found that in the typical study variation in scores was 88% as large as the variation in performance for nonmastery groups. Mastery testing also increased the amount of instructional time required for teaching an area.

Ability Grouping. The practice of ability grouping has had a long and controversial history. Ability grouping is supposed to increase student achievement primarily by allowing the teacher to accomdate instruction for individual differences. Reducing the heterogeneity of a group makes it possible for the teacher to provide instruction that is not too easy or too difficult. Slavin (1987) also points out that ability grouping is supposed to allow the teacher to increase the pace and level of instruction for high achievers and provide more individual attention, repetition, and review for low achievers. The principal arguments against ability grouping are that creating groups of low achievers deprives them of the example and stimulation provided by high achievers, and the fact that being labeled and assigned to a low group carries a social stigma and may communicate low expectations to the students. Today, the results of research are still equivocal. However, two

recent analyses of past research have shed some light on the relative effectiveness of ability grouping.

Slavin (1987) and Kulik and Kulik (1982) have reviewed the research on ability grouping and student achievement. Slavin claimed that the evidence does not support the assignment of students to ability grouped classrooms, while Kulik and Kulik claimed a small positive effect of between-class ability grouping.

There are some important differences between the reviews. The research by Kulik and Kulik focused on the effects of ability grouping in secondary schools. Their meta-analysis covered experimental studies that separated students within schools into classes differing in average ability level, as measured by intellegence tests, achievement tests, or prior levels of achievement. Their findings indicate that ability grouping in this context "showed that students gained somewhat more from the grouped classes than they did from the ungrouped ones" (p. 425). The benefits tended to be slight (an increase of about 0.10 standard deviation) for achievement. The benefits for attitudinal measures were greater, that is, ability grouping did appear to have a positive influence students' attitudes toward themselves and schools.

The population being grouped had a significant effect on the results of investigations of ability grouping programs. Studies of programs grouping low ability students together had effect sizes of nearly zero, indicating that these students learn as much in mixed-ability groups. The same held true for studies comparing mixed-ability with multitrack assignments in heterogeneous populations. But when high ability (gifted and talented) students were grouped together and receive enrichment activities, Kulik and Kulik found the effects of ability grouping to be significant and positive.

Slavin's review of research was limited to studies of ability grouping in elementary schools. He found that overall ability grouping in elementary grades produced no significant positive effect on student achievement. However, he did find that cross-grade ability grouping for reading and within-class ability grouping for mathematics is instructionally effective. As a result of his research, Slavin suggests some guidelines for programs using ability grouping. First, if ability grouping is to be effective it must reduce the heterogeneity of groups in a particular skill, not just on general measures of ability. Second, The plan must be flexible enough to allow teachers to respond to misassignment and changes in student performance level after initial placement. Third, teachers must actually vary their pace and level of instruction to correspond to students' level of readiness and learning rates. As a result,

ability-grouping by class is unlikely to be an effective method of increasing student achievement. These guidelines are in correspondence with the model of adaptive teaching discussed earlier in this paper.

Summary. In summary, the existing research provides empirically based guidelines for how instruction in social studies can be designed to increase students' concept acquisition, problem solving ability, and reading/writing abilities. The research on cooperative learning and mastery learning promises effective alternative methods for teaching social studies, while the research on ability grouping and individualized instructional systems indicates little or no evidence to support their use with general populations at the secondary level.

Effective Teaching--Alternatives to the Psychologistic View

Hargreaves (1988) identifies two sets of assumptions concerning the determinants of effective teaching that can be found in psychologistic research. First, there is a claim that "teaching quality results from learned knowledge, skill, and other technical expertise acquired through initial training and further professional experience" (p. 211). Following from the first assumption there is the belief that "attention should be directed to developing these kinds of competence in initial training" (p. 211). He goes on to argue that "poor teaching quality, it is implied, results from an absence of the required competencies and qualities." What is proposed by the psychologistic view of effective teaching is a deficit model of teaching, "where poor quality results from deficiencies in personality, gaps in learning, or weak matching of of competencies to tasks" (p. 211). Teacher effectiveness research reinforces existing images of what "good teaching" really is. As a result, in an effort to change teaching, it is likely that the recommendations from research on teacher effectiveness will keep teaching the same by failing to beyond the traditional notions of effective teaching.

The limitations of scholarly knowledge based upon the empirical study of teaching effectiveness (e.g., Gage, 1986; Brophy & Good, 1986) have been discussed by Shulman (1987). He warns against the temptation to oversimplify the otherwise extremely complex activity of teaching as generic principles of teaching are explicated and codified. The great danger, according to Shulman, is that general teaching principles will be distorted into prescription, transforming maxims into mandates. Shulman also notes that:

> Rosenshine (1986) has observed that effective teaching research has much less to offer to the teaching of understanding, especially of complex written material; thus, the research applies more to teaching a skill

> like multiplication than to teaching critical interpretations of, say, the Federalist Papers. (p. 10)

As an alternative, Hargreaves posits that effective teaching actually results from "processes of a social nature, from teachers actively interpreting, making sense of, and adjusting to, the demands and requirements their conditions of work place upon them" (p. 211). From this point of view teachers "are not bundles of skills, competencies and technique but are creators of meaning, interpreters of the world...striving for meaning in circumstances that are usually much less than ideal and which call for constant adjustment, adaptation and redefinition" (p. 216).

> Teaching is certainly a matter a competence. But it is competence of a particular kind. It is the competence to recognize and enact the rules, procedures and forms of understanding of a particular cultural environment. What is involved is not technical competence to operate in a pre-given, professionally correct and educationally worthwhile way, but cultural competence to "read" and "pass" in a system with its own specific history, a system once devised and developed to meet a very particular set of social purposes. (Hargreaves, 1988, p. 217)

Hargreaves alternative framework allows us to use "culture" as a metaphor for thinking about teacher effectiveness as well as student success and failure in schools.

White (1988) has provided the most comprehensive assessment of reserach on social studies which uses culture as the metaphor for thinking about and framing what happens in social studies classrooms. In her review of ethnographic research on social studies curriculum and instruction, White examines the problem of how to account for student success and failure in the classroom. Traditionally teachers' explanations for failure focus on blaming the victim, for innate deficiences external to the classroom that prevent learning. Or, teachers may blame themselves, in both cases there is a deficit model of teaching and learning in operation.

White argues that pupil success and failure are not randomly distributed within communities, schools, and classrooms. Since variation human behavior is culturally patterned, she points out that it is not surprising that there are at least five explanations using the concept of culture have emerged from the literature to account for student failure.

> Each of the explanations offers a different perspective on how teachers interact with learners and how they diagnose and sort students. Each stance is based on a different version of how learning happens and what success is, and each has a different description of how failure occurs. (pp. 257)

The first explanation is that students who do not do well in school, such as minorities and children from low soci-economic class background, are culturally deficient. White points out that anthropologists have rejected this position. However, this explanation still drives educational policy, for example, the Headstart program was established to provide an opportunity for "culturally inadequate" children to acquire middle class competencies.

Drawing on microethnographic research studies (e.g., Bremme & Erickson, 1977; Mehan, 1979), White identifies the second explanation for student failure as focusing on initial socialization--that is "how children entering school for the first time learn how to 'do' school" (p. 257). Research in this area examines how the complex collaborative behaviors required to be "socially competent" are mutually acquired by neophyte students and their teachers.

When focusing on classroom lessons as social interactions, evaluation of success and failure means that rather than judging students as disruptive or troublesome, "a teacher deals with the notion that the student is not yet socially competent (and therefore must be taught these social skills)" (p. 260). The underlying assumption of studies of intial socialization, according to White, is that "students and teachers need time and repeated practice in order to 'get their act together'" (p. 262). This is particularly true when the student and teacher do not share the same communication patterns (Byers & Byers, 1972).

The third explanation emphasizes cultural discontinuities as the cause of failure. For example, Phillips (1974) developed the concept of participant structure to explain why Native American children showed great reluctance to talk in class and why they participated less in verbal interacteractions. In these studies, Phillips found that tacit rules governing what is appropriate verbal behavior in the Native American community studied were discontinuous with the social structure for participation in schools.

For example, the social structure of Native American and American middle-class communities is quite different and this is reflected in expectations about how learning occurs.

> Middle-class parents instruct by giving explicit verbal instructions that are follwed by specific questions to

> ascertain that the children have grasped what they (the parents) just said. In contrast...[Native American] children are expected to learn by paying patient attention to adult conversation and activities. After observing adults, the children then take the initiative to practice the skill in private. Only when they have mastered [the skill] will the successful results be displayed for the adult. (White, 1986, p. 265)

There is a developing body of literature that describes the participant structures of various groups of Native American children (e.g., Boggs, 1972; Au and Jordan, 1979; Dumont, 1972; Levin 1981). Au (1980) argues that teachers may adapt their methods to be more congruent with those of minority children participant structures. However, Au warns that this practice might ultimately handicap minority children. For lessons to be appropriate, according to Au, they should promote the types of learning valued in the mainstream culture while using participant structures that are comfortable and make cultural sense for both the students and the teacher.

The fourth explanation for student failure identified by White is cultural confilict at the daily interactional level. This explanation is based on the premise that children do not act illogically or randomly and that in some cases disruptive behavior and academic failure can be initially functional behavior for students. For example, McDermott (1976) found that in a first-grade classroom the bottom reading group was highly structured by the teacher, which left the group without a procedure whenever the teacher was interruped or distracted from the groups activity. McDermott illustrates how arguments and fights in the low reading group which initially appeared to be disruptive, actually can be seen to have the effect of making the teacher come back to them. However this short run effective behavior is self-defeating in the long run.

In a review of linguistic and ethnographic studies, Labov (1982) explains the negative correlation of participation in "vernacular" (gang) culture with achievement in school in terms of competing value systems. Labov illustrates the direct competition that exists between school culture and gang culture. The gang members' inability to accept school values is attributed to an unwillingness to accept the shool's structure of power and authority. Labov believes vernacular culutre should not be viewed as a distructive force, but should be studied to see how the group norms can be adapted to the school culture. The goal would be to develop a common core of values or goals between the competing cultures.

The final explanation offered by White is that school failure is the by-product of larger cultural antagonisms and

competing values systems. These researchers (Wolcott, 1974; Ogbu, 1981) perceive conflict in the classroom as merely an expression of larger, longer-lasting, permanent cultural conflict, which has its source outside of schools. The emphasis in this perspective is on the difference between the two cultures and similarities are downplayed. Wolcott describes students from minority cultures as being "prisoners of war."

> Wolcott argues that teachers should make their ways of life appear manageable and be willing to give instruction on those aspects that have survival value for those who want to move successfully in the dominant society....The role of the teacher would be to offer help to those peopl who want it, rather than bemoan the lack of defection by the prisoner generation of today. (White, 1988, p. 280)

Summary. In the studies reviewed by White, one of the most significant determinants of student success or failure in classrooms is the type of social relationship that exists between the student and the teacher. There are three types of social relationships that are established between students and teachers: (a) initial socialization situations, (b) situations characterized by incongruity between participant structures indigenous to the community and to the school, and (c) secondary cultural discontinuities.[5]

These accounts of student success and failure allow us to make overt many taken-for-granted dimensions of teaching. White posits three important implications. First, microethnographies illustrate how glitches in teacher-student communication are interactional problems. Rather than the teacher or students being seen as lazy or incompetent communication problems can be studied and corrected.

A second implication is that teacher may want to consider issues related to participant structures when making decisions about how to open and close their lessons; how they judge time necessary for completion of student work; how transitions are initiated; classroom organization; methods of evaluation; lesson pace; nonverbal behaviors; and patterns of voice use.

A final implication for practice can be identified from accounts of teacher intervention utilizing principles of cultural accomodation. "Similar to the structural overlapping of two Venn diagrams, lessons are designed so that each set of participants can make sense of the learning event through the presence of familiar forms of communication" (White, 1988, p. 287).

It must be remembered that the nature of knowledge generated in this literature is descriptive, not prescriptive. White emphasizes that the objective of her review was to provide a knowledge base for social studies teachers to use as they perceive and reflect on their own situations. There is no research available that explains the variability of why some students succeed in classrooms where others fail. White concludes that, the key determinant in student success and failure is not the authority structure of the school or the type of instructional strategies used by teacher, but "the core of shared values and a steady state of social relationships that are accepted by all participants as being in their best interests" (p. 293).

Conclusion

The effectiveness of traditional models for the remediation of students in school over the past several years has been called into question. Current research supports models that would merge remedial and regular education and provide all students with a broad range of curriculum access and the opportunity to receive instruction that is adaptive to their needs.

Based on this review of research several guidelines (not prescription) for addressing remediation in social studies might be generated. It is important that our response to mandates such as the one in New York State draw on a variety of theoretical perspectives. There is a clear need for a better understanding of aspects of student success and failure from both psychological as well as sociologcial and anthropological points of view. This approach will help up to avoid the tunnel vision Schwab warns us of when only one of a collection of competing theories is used to frame a problem and concieve of alternatives of education.

Our attention should shift from a concern about the deficits of students to concern about the quality of the pupil's learning environment. This shift in emphasis has two important implications. First, remediation efforts would become part of a broad program of adaptive education for all students. Secondly, the importance of the context and processes of schooling would take their place alongside issues of cognitive processes in discussions of appropriate curriculum and instructional strategies to be used in teaching social studies.

The dynamic interactional character of the teaching-learning process requires us to attend not only to the curriculum goals, teaching strategies, and student apptitudes in creating effective learning environments, but also to the cultural context of teaching and learning.

There are no easy answers that can be applied in all situations, however, increased collaboration among those school professionals with expertise in diverse areas seems to be the most appropriate path for the future. This would mean special needs teachers and subject area teachers should collaborate in planning, assessment of student performance, providing for basic skill instruction, and developing and implementing adaptive instruction.* This type of collaborative and adaptive teaching will offer a myriad of advantages over conventional instruction, including:

1. Provides a more varied and interesting curriculum
2. Less chance of labeling, that leads to discrimination
3. More help available to more pupils with a wider range of abilities
4. Increased expectations of teachers for low achieving students
5. Greater opportunities for team teaching
6. Debate, dialogue, and discussions among teachers, which means more careful analysis of subject content, teaching and learning styles, and resources for all students
7. Improved working relationships among staff
8. Greater continuity of teaching.

If we can increase the opportunity for all students to receive appropriate levels and type of instruction, we will be creating an opportunity for the achievement of equality and excellence in education.

References

Anderson, J. R. (1984). Some reflections on the acquisition of knowledge. Educational Researcher, 13(9), 5-10.

Aronson, E. (1978). The jigsaw classroom. Beverly Hills, CA: Sage.

Au, K. (1980). Participation structures in a reading lesson with Hawaiian children: Analysis of s culturally appropriate instructional event. Anthropology and Education Quarterly, 11, 91-115.

Au, K., & Jordan, C. (1981). Teaching reading to Hawaiian children: Finding a culturally appropriate solution. In H. Trueba, G. Guthrie, and K. Au (Eds.), Culture in the bilingual classroom: Studies in school ethnography. Rowley, MA: Newbury House.

Ausubel, D. P. (1962). A subsumption theory of meaningful verbal learning and retention. Journal of General Psychology, 66, 213-224.

Bangert, R. L., Kulik, J. A., & Kulik, C.-L. C. (1983). Individualized systems of instruction in secondary schools. Review of Educational Research, 53(2), 143-158.

Bines, H. (1986). Redefining remedial education. London: Croom Helm.

Bloom, B. S. (1984). The two-sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. Educational Researcher, 13(6), 4-16.

Boggs, S. (1972). The meaning of questions and narratives to Hawaiian children. In C. Cazden, V. John, & D. Hymes (Eds.), Functions of language in the classroom. New York: Teachers College Press.

Bremme, D., & Erickson, F. (1977). Relationships among verbal and non-verbal ways of action in a classroom. Theory Into Practice, 16, 153-161.

Bruner, J. S. (1961). The act of discovery. Harvard Educational Review, 31, 21-32.

Byers, P., & Byers, H. (1972). Nonverbal communication and the education of children. In C. Cazden, V. John, & D. Hymes (Eds.), Functions of language in the classroom. New York: Teachers College Press.

Clark, M. M. (1977) Why remediate? Implications of using the concept of remedial education. In C. W. Gains and

J. A. McNicholas (Eds.). Remedial education: Guidelines for the future (pp. 18-26). London: Longman.

Corno, L., & Snow, R. E., (1986). Adapting teaching to individual differences among learners. In M. C. Wittrock (Ed.), Handbook of research on teaching, (3rd. ed., pp., 605-629). New York: Macmillan.

Cornwall, K. F. (1985). Some trends in pupil evaluation: The growing importance of the teacher's role. In C. J. Smith (Ed.), New directions in remedial education, (pp., 123-131). London: Falmer Press.

Cronbach, L. J., & Snow, R. E. (1977). Aptitudes and instructional methods. New York: Irvington/Naiburg.

Dumont, R. V. (1972). Learning English and how to be silent: Studies in Sioux and Cherokee classrooms. In C. Cazden, V. John, & D. Hymes (Eds.), Functions of language in the classroom. New York: Teachers College Press.

Flanagan, J. C., Shanner, W. M., Brudner, H. J., & Marker, R. W. (1975). An individualized instructional system: PLAN. In H. Talmage (Ed.), Systems of individualized education. Berkeley, CA: McCutchan.

Ford, M. J., McKinney, C. W. (1986). The effects of recycling and response sensitivity on the acquisition of social studies concepts. Theory and Research in Social Education, 14(1), 21-33.

Gagne, R. M. (1970). The conditions of learning (2nd. ed.). New York: Holt, Rinehart & Winston.

Glaser, R. (1977). Adaptive education: Individual diveristy and learning. New York: Holt, Rinehart & Winston.

Glaser, R. (1984). Education and thinking: The role of knowledge. American Psychologist, 39, 93-104.

Glaser, R., & Rosner, J. (1975). Adaptive environments for learning: Curriculum aspects. In H. Talmage (Ed.), systems of individualized learning. Berkeley, CA: McCutchan.

Johnson, D., & Johnson, R. (1975). Learning togther and alone. Englewood Cliffs, NJ: Prentice-Hall.

Keller, F. S. (1968). Good-bye, teacher.... Journal of Applied Behavior Analysis, 1, 79-89.

Klausmeier, H. J., & Hooper, F. H. (1974). Conceptual development and instruction. In F. N. Kerlinger and J. B. Carroll (eds.), Review of research in education, 2. Itasca, IL: F. E. Peacock.

Kleg, M., Karabinus, R., & Carter, T. (1986). Direct concept instruction in US history. Journal of Social Studies Research, 10(2), 1-12.

Kulik, C.-L. C., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. American Educational Research Journal, 19, 415-428.

Kulik, J. A., Kulik, C.-L. C., & Bangert-Drowns, R. L. (1988). Effectiveness of mastery learning programs: A meta-analysis. Ann Arbor, MI: The University of Michigan.

Labov, W. (1982). Competing value systems in the inner-city schools. In P. Gilmore & A. Glatthorn (Eds.), Children in and out of school: Ethnography and education. Washington, DC: Center for Applied Linguistics. (ERIC Document Reproduction Service No. ED 215 554)

Leming, J. S. (1985). Research on social studies curriculum and instruction: Interventions and outcomes in the socio-moral domain. In W. B. Stanley (Ed.), Review of Research in Social Studies Education: 1976-1983. Washington, DC: National Council for the Social Studies.

Levin, P. (1981). The cultural context of curriculum development. Paper presented at the annual meeting of the American Anthropological Association, Los Angeles, California.

Markle, S. M., Tiemann, P. W. (1976). Conceptual learning and instructional materials. In P. H. Martorella, Social studies: Theory into practice, (pp. 34-55). New York: Harper & Row.

Martorella, P. H. (1977). Social studies learning and instruction: Cognition. In F. P. Hunking, L. H. Ehman, C. L. Hahn, P. H. Martorella, J. C. Tucker, Review of research in social studies education: 1970-1975. Washington, DC: National Council for the Social Studies.

Martorella, Ph. H. (1971). Concept learning in the social studies: Models for structuring curriculum. New York: Intext.

McDermott, R. P. (1976). Kids make sense: An ethonographic account of the interactional management of success and failure in one first grade classroom. Doctoral dissertation, Stanford University.

McKinney, C. W. (1985). A comparison of the effects of a definition, examples, and nonexamples on studetn acquisition of the concept of "transfer propaganda." Social Education, 49(1), 66-70.

McKinney, C. W., Ford, M. J., Larkins, A. G., & Peddicord, H. Q. (1984). The effectiveness of three methods of teaching social studies concepts to sixth-grade students. Journal of Educational Research, 78(1), 35-39.

McKinney, C. W., Larkins, A. G., Burts, D. C., & Davis, J. C. (1982). Teach social studies concepts to first grade students? Research on the Merrill and Tennyson model. The Social Studies, 73(5), 235-238.

McKinney, C. W., Larkins, A. G., Ford, M. J., & Davis, J. C. III. (1983). The effectiveness of three methods of teaching social studies concepts to fourth-grade students: An aptitude-treatment interaction study. American Educational Research Journal, 20(4), 663-670.

McKinney, C. W., Larkins, A. G., & Peddicord, H. Q. (1982). A comparison of three instructional designs for teaching social studies concepts to fourth-grade students. Journal of Social Studies Research, 6(2), 45-47.

McNicholas, J. A. (1979). Aims of remedial education: A critique. In C. W. Gains and J. A. McNicholas (Eds.), Remedial education: Guidelines for the future. (pp. 27-35). London: Longman.

Mehan, H. (1979). Learning lessons: Social Organization in the classroom. Cambridge, MA: Harvard University Press.

Merrill, M. D., & Tennyson, R. D. (1977). Concept teaching: An instructional design approach. Englewood Cliffs, NJ: Educational Technology.

Ogbu, J. (1982). Cultrual discontinuities and schooling. Anthropology and Education Quarterly, 13, 290-307.

Paivio, A. (1969). Mental imagery in associative learning and memory. Psychological Review, 76, 241-263.

Phillips, R. C. (1977). Teaching for thiking in high school social studies. Reading, MA: Addison-Wesley.

Phillips, S. (1972). Participant structures and communicative competence: Warm Springs children in community and classroom. In C. Cazden, V. John, D. Hymes (Eds.), Functions of language in the classroom. New York: Teachers College Press.

Reynolds, M. C., Wang, M. C., & Walberg, H. J. (1987). The necessary restructuring of special education and regular education. Exceptional Children, 53(5), 391-398.

Rosenberg, M. S., & Jackson, L. (1988). Theoretical models and special education: The impact of varying world views on service delivery and research. Remediation and Special Education, 9(3), 26-34.

Schwab, J. J. (1978). Science Curriculum, and liberal education: Selected Essays. Chicago: University of Chicago Press.

Segal, J. W., Chipman, S., & Glaser, R. (1985). Thinking and learning skills, Vol. 1, Relating instruction to basic research. Hillsdale, NJ: Erlbaum.

Sharan, S. S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes, and ethnic relations. Review of Educational Research, 50, 12-26.

Shuell, T. J. (1986). Cognitive conceptions of learning. Review of Research in Education, 56(4), 411-436.

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, 57(1), 1-22.

Slavin, R. E. (1980). Cooperative learning. Review of Educational Research, 50, 315-342.

Slavin, R. E. (1983). Cooperative learning. New York: Longman.

Slavin, R. E. (1987). Ability grouping and student achievement in elementary school: A best evidence synthesis. Review of Educational Research, 57(3), 293-336.

Snow, R. E. (1982). The training of intellectual aptitude. In D. K. Detterman & R. J. Sternberg (Eds.), How and how much can intelligence be increased? Norwood, NJ: Ablex.

Snow, R. E., & Lohman, D. F. (1984). Toward a theory of cognitive aptitude for learning from instruction. Journal of Educational Psychology, 76, 347-376.

Solomon, D., & Kendall, A. J. (1979). Children in classrooms: An investigation of person-environment interaction. New York: Praeger.

Stainback, W., & Stainback, S. (1984). A rationale for the merger of special and regular education. Exceptional Children, 51(2), 102-111.

Stanley, W. B. (1984). Approaches to teaching concepts and conceptualization: An analysis of social studies methods textbooks. Theory and Research in Social Education, 11(4), 1-14.

Stanley, W. B., & Mathews, R. C. (1985). Recent research on concept learning: Implications for social education. Theory and Research in Social Education, 12(4), 57-74.

Taba, H. (1971). A teachers handbook to elementary social studies. Reading, MA: Addison-Wesley.

Tawney, J. W., & Gast, D. L. (1984). Single subject research in special education. Columbus, OH: Merrill.

Tennyson, R. C., Chao, J. N., & Youngers, J. (1981). Concept learning effectiveness using prototype and skill development presentation forms. Journal of Educational Psychology, 73, 326-334.

Tennyson, R. D., & Cocchiarella, M. J. (1986). An empirically based instructional design theory for teaching concepts. Review of Educational Research, 56,(1), 40-71.

Tennyson, R. D., & Park, D. C. (1980). The teaching of concepts: A review of instructional design literature. Review of Educational Research, 50, 55-70.

Tennyson, R. D., Youngers, J., & Suebsonthi, P. (1983). Concept learning by children using instructional presentation forms for prototype formation and classification-skill development. Journal of Educational Research, 75(2), 280-291.

Weinstein, C. E., & Mayer, R. E. (1986). The teaching of learning strategies. In M. C. Wittrock (Ed.), Handbook of research on teaching, (3rd. ed., pp. 315-327). New York: Macmillan.

Wesley, E. B., & Wronski, S. P. (1958). Teaching social studies in high schools. Boston: D. C. Heath.

White, J. J. (1985). What works for teachers: A review of ethnographic research studies as they inform issues on social studies curriculum and instruction. In W. B. Stanely (Ed.), Review of research in social studies education: 1976-1983, (pp. 215-308). Washington, DC: National Council for the Social Studies.

Wittrock, M. C. (1974). Learning as a generative process. Educational Psychologist, 13, 15-29.

Wolcott, H. (1974). The teacher as enemy. In G. Spindler (Ed.), Education and cultural process: Toward an anthroplogy of education. New York: Holt, Rinehart, & Winston.

Yoho, R. F. (1986). Effectiveness of four concept teaching strategies on social studies concept acquisition and retention. Theory and Research in Social Education, 14(3), 211-223.

Notes

[1] Conceptual teaching and learning was chosen as the focus of this section because of the enduring interest of social studies researchers in the investigation of these issues and because of the critical role concept teaching and learning continues to take in most social studies education programs.

[2] According to the New York State Educational Department, Bureau of Social Studies Education a concept is a mental image or word picture conveyed by a single word, or word combination. Concepts introduced and emphasized in the K-6 social studies curriculum in New York State include: change, citizenship, culture, empathy, environment, identity, interdependence, nation-state, scarcity, and technology. The 7-12 curriculum builds upon the concepts introduced at the elementary level and introduces six new concepts including: choice, diversity, human rights, justice, political system, and power.

[3] Martorella (1977) points out that the term concept is used in a variety of ways in the social studies literature: (a) as a synonym for the term idea; (b) used to mean a theme; (c) to express a general, all emcompassing condition; (d) to refer to the fundamental elements or structure of disciplines; and (e) to describe categories into which we group our knowledge and experience.

[4] Merrill and Tennyson (1977) stated that the difficulty level of concepts should be determined administering the definition and examples and nonexamples to a sample of students similar to those to be taught. They warn against teachers estimating the difficulty level without a "pilot" test of the examples to be used.

[5] Ogbu (1982) argues that secondary cultural discontinuities develop after members of two populations have been in contact, these discontinuities develop as a response to a contact situation and characterize the distinctiveness of the subordinate group as well as illustrating its opposition to the dominant culture.

[6] Rosenberg and Jackson (1988) note that the skills of special education and regular teachers are similar. Tawney and Gast (1984) describe both tasks, that is effectively teaching regular and special students, requiring: (a) identification and analysis of problems; (b) generation of possible solutions to those problems; (c) implementation of the intervention alternatives in a systematic manner; and (d) documenting the differential effects of intervention alternatives.

TABLE 1

Comparison of Dual and Unified Systems of Education

Concern	Dual System	Unified System
Student characteristics	Dichotomizes students into special and regular	Recognizes continuum among students of intellectual, physical, and psychological characteristics
Individualization	Stresses individualization for students labeled special	Stresses individualization for all students
Instructional Strategies	Seeks to use special strategies for special students	Selects from range of available strategies according to each student's learning needs
Type of educational Services	Eligibility generally based on category affiliation	Eligibility based on each student's individual learning needs
Professional Relationships	Establishes artificial barriers among educators that promote competition and alienation	Promotes cooperation through sharing resources, expertise, and advocacy responsibilities
Curriculum	Options available to each student are limited by categorical affiliation	All options available to every student as needed
Focus	Student must fit regular education or be referred to special education	Regular education program is adjusted to meet all students' needs

Adapted from: Stainback, W., & Stainback, S. (1984). A rationale for the merger of special and regular education. Exceptional Children, 51(1) 102-111.

Table 2

Instructional Design Strategies for Concept Teaching

Attribute Characteristics	Relational Structure	
	Successive	Coordinate
Constant dimensions	Strategy 1	Strategy 2
	Label and definition	Labels and definitions
	Best example	Best examples
	Expository examples (successive presentation)	Expository examples (simultaneous presentation)
	Interrogatory examples (optional)	Interrogatory examples
	Embedded refreshment	Attribute elaboration
		Embedded refreshment
	Strategy 3	Strategy 4
Variable dimensions	Label and definition	Labels and definitions
	Context (problem domain)	Context (problem domain)
	Best example	Best examples
	Expository examples (successive presentation)	Expository examples (simultaneous presentation)
	Interrogatory examples	Interrogatory examples
	Strategy information	Attribute elaboration
	Embedded refreshment	Embedded refreshment

Taken from: Tennyson, R.D., & Cocchiarella, M.J. (1986). An empricially based instructional design theory for teaching concepts. Review of Educational Research, 56 (1), 40-71

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